

# **BOSS** MICRO RACK SERIES

# **RGE-10** **GRAPHIC** **EQUALIZER**

## **INSTRUCTIONS**

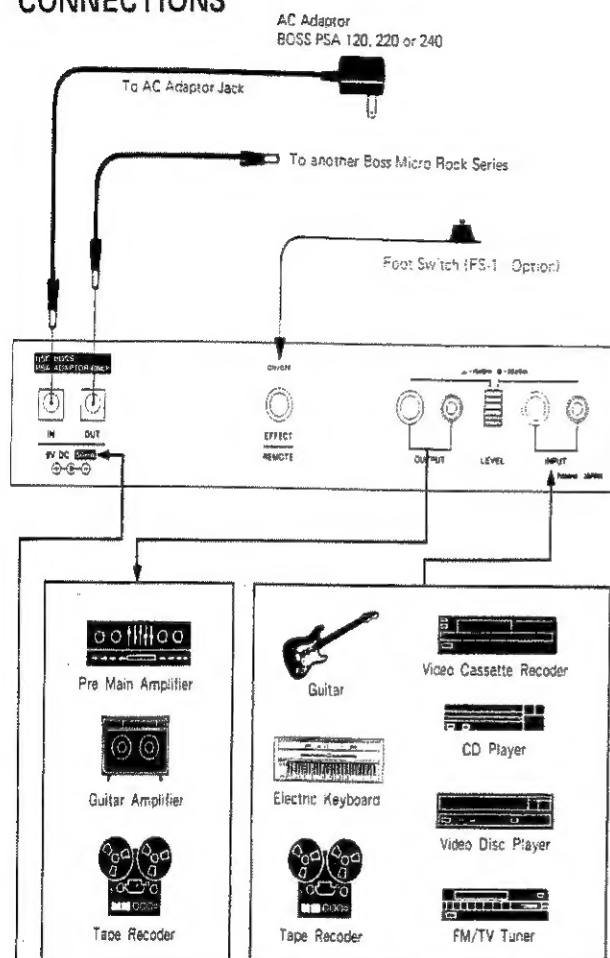
### **FEATURES**

The BOSS RGE-10 is a graphic equalizer that features 10 band slider controls in an octave step from 31Hz to 16kHz, and each of them can vary in the range of  $\pm 12\text{dB}$ . The Level Control serves to minimize the volume difference between the normal and the effect sounds. Moreover, the RGE-10 provides both standard phone and pin jacks for input and output.

The RGE-10 is one of the BOSS Micro Rack Series, and by using a rack mount adaptor RAD-10, any two of the Series can be mounted in a standard 19" rack (EIA-1U).

•Please read the instructions carefully.

## CONNECTIONS



Designed for low noise, RGE-10 can also be included in AV system for tailoring acoustical environment to scenes.

- When you use only an AC adaptor for supplying power to more than one unit, please be sure that the total current draw does not exceed 200mA. (The current draw of each unit is shown on its rear panel.)

## OPERATION

1 Set all the Equalizer Controls and the Level Control to 0dB, and turn the Effect Switch off.

2. Switch the RGE-10 on. (Make sure that the Power Indicator lights up.)

Now, the unit is in the normal mode. (Sound without filtered by the equalizer is obtained.)

3 Set the Level Selector Switch to either position depending on the type of the device you use.

- If it is the noise that you wish to avoid more than anything, set the switch to  $-20\text{dBm}$ . If you are annoyed by distortion, set it to  $-10\text{dBm}$ .

4 Turn the Effect Switch on.

Now, the unit is in the equalizer mode.

5 Connect a footswitch to the Effect Remote Jack.

Now, you can turn the unit to the equalizer or normal mode just by depressing the pedal.

- If the Effect Switch on the front panel has been turned off, above remote control function cannot be obtained.

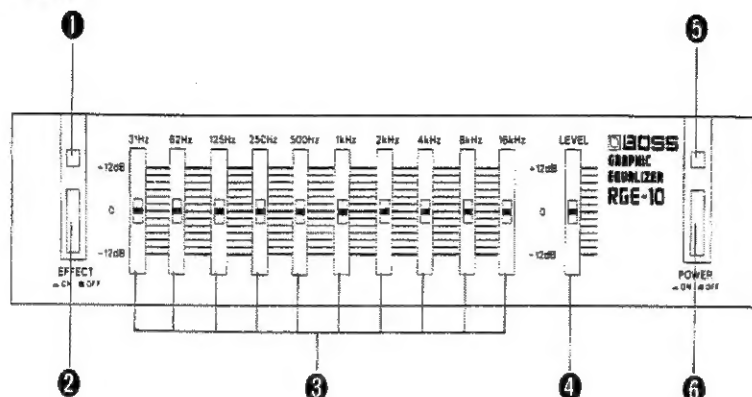
Try moving each Equalizer Control to see how it affects the tone color, then make your own sounds.

## NOTE

The RGE-10 is a low-noise equalizer itself, but note that raising the slider will emphasize the noise generated by the connected device.

## PANEL DESCRIPTIONS

<Front Panel>



### 1 EFFECT INDICATOR

This lights up when the RGE-10 is in the equalizer mode. So you can easily see whether it is now in the normal or equalizer mode.

### 2 EFFECT SWITCH

Each time you push this switch, the unit selects the equalizer or normal mode.

### 3 EQUALIZER CONTROLS

10 band sliders of 31Hz to 16kHz are provided in an octave step, and each slider allows the level control within the range of  $\pm 12\text{dB}$ . Also, the sliders feature center-clicks and LED's for accurate and fast "0dB" level settings.

### 4 LEVEL CONTROL

The Level Control serves to minimize the volume difference between the normal and the effect sounds. Set this to an appropriate position to avoid volume decrease or increase caused by changing from normal to equalizer mode. This control allows level control within the range of  $\pm 12\text{dB}$  and features center-click and an LED.

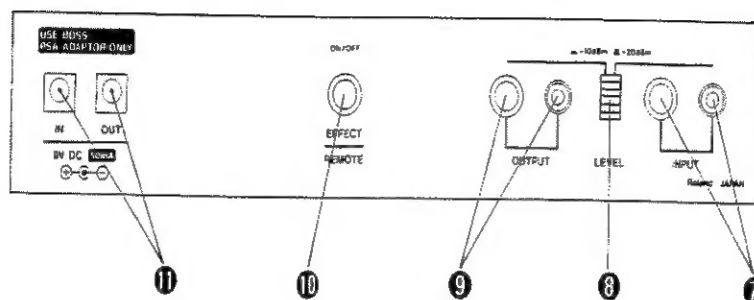
### 5 POWER INDICATOR

This indicator lights up when the unit is switched on.

### 6 POWER SWITCH

The unit is turned on by pressing this switch. The Power Indicator and all the indicators on the panel will light up.

## <Rear Panel>



### 7 INPUT JACKS

To this jack, connect an electric guitar, electronic musical instrument, tape recorder etc.

- The standard phone jack and the pin jack do not work at a time. When both are used at the same time, the standard phone will have priority.

### 8 LEVEL SWITCH

Select either position depending on the type of the device you use. Usually, when an electric guitar or electronic musical instrument is used, set this switch to “-20dBm”, and when audio equipment is used, set it to “-10dBm”.

### 9 OUTPUT JACKS

Connect this to a guitar amplifier, tape recorder etc. Both standard phone and pin jacks work simultaneously.

### 10 EFFECT REMOTE JACK

By connecting an optional footswitch FS-1 to this jack, you can turn the unit to the Effect On (= equalizer mode) or to the Effect Off (= normal mode) without reaching out your hand.

- When the Effect Switch on the front panel is turned off, the footswitch does not work.

### 11 AC ADAPTOR JACK

Usually, connect the AC adaptor (BOSS PSA-120, 220 or 240) to “IN”. However, for supplying power to other BOSS Micro Rack Series, connect the supplied DC cord to “OUT”.

## EQUALIZER CONTROLS

### 31Hz

This is the lowest band of all, and may be cut and used as a subsonic filter, as it cannot be played back by a small speaker. When, however, a large speaker is provided, you may boost this band to obtain reverberation effect.

### 62Hz

By cutting this band, hum noise can be removed, therefore clear sound is obtained. You may boost it to emphasize bass drum and make heavy and stable sound.

### 125Hz

This band may be boosted to emphasize the bass guitar sound.

### 250Hz

This can be boosted to make a fat strings sound. By cutting this, however, clear bass sounds are obtained.

### 500Hz

This is the fundamental band for human voice or musical instruments. By boosting this, more vigorous sound will be obtained.

### 1kHz

This can be used to control the presence of voice. Depending on the position of this slider, the vocal sound can be emphasized or de-emphasized.

### 2kHz

By boosting this, the brass sound becomes brighter.

### 4kHz

This controls the brightness of sound. Realistic violin bowing can be obtained by boosting this.

### 8kHz

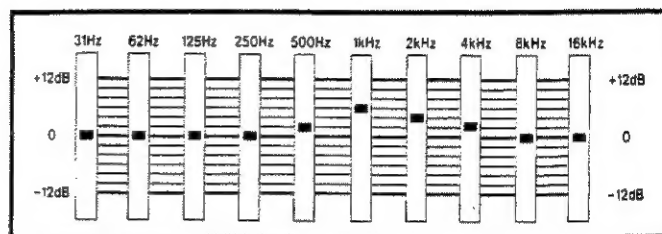
By boosting this, more percussive cymbal sound can be obtained. Also, hiss noise of a tape can be reduced by cutting this band.

### 16kHz

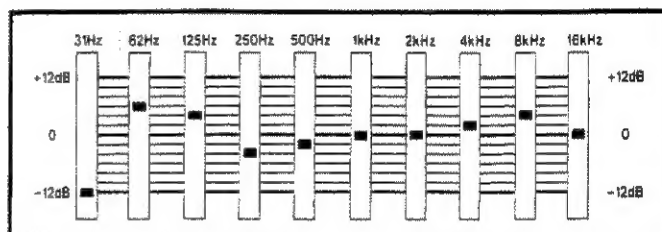
This can be used more for changing the air of the sound rather than changing the tone color itself.

## BASIC SETTING EXAMPLES

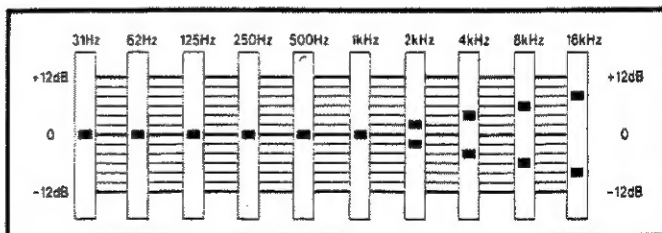
### 1. Emphasizing Vocals



### 2. Powerful Sound



### 3. Reducing Hiss Noise of Tape

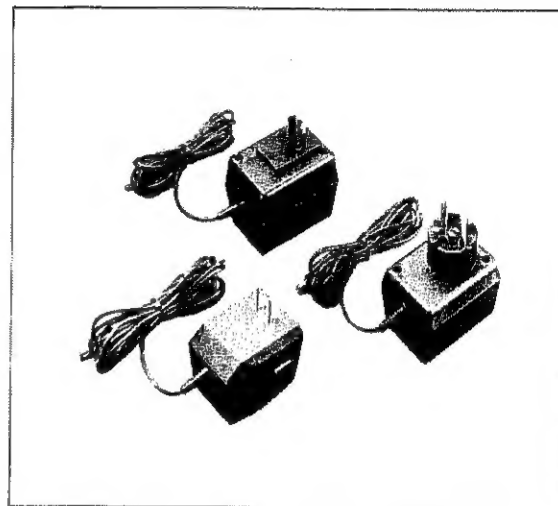


## IMPORTANT NOTES

- Be sure to use the AC Adaptor BOSS PSA-120, 220 or 240 depending on the line voltage system in your country.
- When you use only an AC adaptor for supplying power to more than one unit, please be sure that the total current draw does not exceed 200mA. (The current draw of each unit is shown on its rear panel.)
- When the unit is not to be used for a long period of time, disconnect the AC adaptor from the wall socket.
- Avoid using the unit in extreme heat or humidity or where it may be affected by dust.
- Please never remove the cabinet from the body of the unit.

## AC ADAPTOR BOSS PSA-120, 220 OR 240

Be sure to use the optional BOSS PSA series. Using any other adaptor will cause trouble.



## RACK MOUNT INSTALLATION

The RGE-10 is one of the BOSS Micro Rack Series, and by using the Rack Mount Adaptor RAD-10, any two sets of the Series can be mounted in a standard 19" rack (EIA-1U).

Remove the rubber feet from the units (4), then attach the units to the Rack Mount Adaptor RAD-10, then mount the whole set in the rack.

## SPECIFICATIONS

**Input Level/Input Impedance:** -20dBm/1M $\Omega$ , -10dBm/47k $\Omega$   
**Output Level/Output Impedance:** -20dBm/2k $\Omega$ , -10dBm/2k $\Omega$   
**Output Load Impedance:** over 10k $\Omega$   
**Frequency Response:** 10Hz to 60kHz (+0 dB when flat)  
**Residual Noise:** -100dBm  
 (IHF-A: flat, Level Switch: -20dBm)  
**Center Frequency:** 31Hz, 62Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz, 16kHz  
**Variable Range:**  $\pm 12$ dB  
**Gain:** UNITY (0dB) when flat  
**Controls:** 10 band Equalizers  
 (center click, with LED's, slide volumes)  
 Level (center click, with LED, slide volume)  
**Switches:** Power  
 Effect (Normal/Equalizer)  
 Level (-20dBm/-10dBm)  
**Jacks:** Input (Standard Phone, Pin)  
 Output (Standard Phone, Pin)  
 Effect Remote (On/Off)  
 AC Adaptor (In, Out)  
**Indicators:** Power  
 Effect

**Power:** 9V DC (BOSS PSA-120, 220 or 240)  
**Current Draw:** 50mA  
**Dimensions:** 218 (W) x 46 (H) x 160 (D) mm  
 8-9/16" (W) x 1-13/16" (H) x 6-5/16" (D)  
**Weight:** 900g/2 lb  
**Accessories:** DC Cord (0.5m)  
**OPTIONS:** AC Adaptor BOSS PSA-120, 220 or 240  
 Rack Mount Adaptor RAD-10  
 Footswitch FS-1

● Specifications are subject to change without notice.



Products of Roland

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